

**REMARKS**

Claims 1 and 2 have been examined and have been rejected under 35 U.S.C. § 103(a).

Claims 4-7 are withdrawn as being directed to a non-elected invention.

**I. Rejections under 35 U.S.C. § 103(a) in view of U.S. Patent No. 5,448,418 to Hotate et al. (“Hotate”) and U.S. Patent No. 4,124,667 to Coppola (“Coppola”) or U.S. Patent No. 6,090,733 to Otsuki et al. (“Otsuki”) (assigned to Bridgestone Corporation)**

The Examiner has again rejected claims 1 and 2 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Hotate in view of Coppola or Otsuki.

**A. Claim 1**

Claim 1 recites, “wherein the coating film layer has a thickness of 20  $\mu\text{m}$  or more and 40  $\mu\text{m}$  or less and a surface roughness (Ra) of 10 nm or less, and wherein the coating film layer containing silicon carbide is provided on a whole perimeter of the surface of the dummy wafer including a side surface of the dummy wafer.”

Hotate is directed to a mirror for synchrotron optical radiation (SOR). The thickness of the SiC film 3 after polishing is 30 to 300  $\mu\text{m}$  and the thickness of the SiC film 4 is 30 to 300  $\mu\text{m}$  (col. 2, lines 47-51). In the February 17, 2010 Amendment, Applicant argued that a total thickness of the SiC film 3 and the SiC film 4 would therefore be at least 60  $\mu\text{m}$ . Thus, Hotate fails to meet the requirements of the claimed invention in that a total thickness of the SiC film 3 and the SiC film 4 is equal to or more than 20  $\mu\text{m}$  or more and 40  $\mu\text{m}$  or less. Moreover, in Hotate, the bottom surface is also covered with the SiC film 2 which is not polished. Due to this, Applicant previously noted that it is considered that a total thickness of the SiC films would at least be thicker than 90  $\mu\text{m}$  (i.e., thicker than the claimed invention).

Furthermore, Applicant previously noted that in the present invention, the claimed range is provided to prevent warpage of the dummy wafer. In particular, the coating film layer is preferably made thin to a degree such that the base material may not be exposed during the polishing step while maintaining the thickness of the base material to be thick to a certain extent (pg. 24, lines 8-22 of present Application).

Since Coppola or Otsuki fail to cure the deficient teaching of Hotate, Applicant submitted that claim 1 is patentable over the cited references.

In the present Office Action, the Examiner responds to the above arguments by noting that Hotate actually discloses an example where a *single* SiC film is used (pg. 5 of Office Action). In particular, the Examiner refers to Figures 3 and 4.

Applicant submits that in Hotate, the first coatings 2 have the same thickness of 100 microns (see col. 3, lines 50-51). Also, with regard to Hotate's teaching of sample 2, which is a single coating, Applicant submits that the mirror of Hotate's invention comprises a base, a first intermediate SiC coating, and a second SiC coating. The first coating 2 of a thickness of 30 microns is formed on the base 1 of Sample No. 2. After that, *however*, a second SiC coating 5 having a thickness of 130 microns is formed on the surface of portions 3 (see col. 3, lines 50-51). In other words, more than a single coating is provided. Accordingly, Applicant continues to submit that claim 1 is patentable over the cited references.

**B. Claim 2**

By this Amendment, Applicant has incorporated the features of claim 2 into claim 1. Accordingly, claim 2 has been canceled without prejudice or disclaimer.

**II. Rejections under 35 U.S.C. § 103(a) in view of Hotate, Coppola or Ostuki and U.S.**

**Patent No. 4,856,887 to Wakugawa ("Wakugawa")**

The Examiner has rejected claims 1, 2 and 9 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Hotate in view of Coppola or Otsuki and Wakugawa.

**A. Claim 1**

Applicant submits that claim 1 is patentable for analogous reasons as set forth above regarding the rejection of claim 1 in view of Hotate, Coppola and Otsuki. Applicant submits that Wakugawa fails to cure the deficient teachings of the Hotate, Coppola and Otsuki .

**B. Claim 2**

By this Amendment, Applicant has incorporated the features of claim 2 into claim 1. Accordingly, claim 2 has been canceled without prejudice or disclaimer.

**III. Conclusion**

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

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Respectfully submitted,

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